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(54) CATALYST FOR CLEANING EXHAUST GAS

is secured by adopting a catalyst consisting of zeolite and Pt borne by the former through ion exchange especially as the first catalyst 1.

(57) Abstract:

PROBLEM TO BE SOLVED: To significantly enhance the NO_x cleaning performance by providing a catalyst for oxidizing NO into NO₂ and a catalyst for reducing NO₂ into N₂ and in addition, a catalyst for reducing NO into N₂ and further, bringing the catalyst for reducing NO into N₂ into contact with an exhaust gas ahead of the other catalysts.

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SOLUTION: In the catalyst for cleaning an exhaust gas to be discharged from an engine operated at a lean air fuel ratio, a first catalyst 1 for reducing NO contained in the exhaust gas into N₂ in the presence of HC, a second catalyst 2 for oxidizing NO into NO₂ and a third catalyst 3 for reducing NO₂ produced by oxidation using the second catalyst 2, into N₂ in the presence of HC, are arranged sequentially from an upstream side to a downstream side in the exhaust gas flow direction A. In this case, the NO → N₂ reduction reaction by the first catalyst 1 can be promoted while HC required for the reduction reaction by the third catalyst 3

